

*Department of Social and Health Services  
Health and Recovery Services Administration*



# QUALITY ASSURANCE

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STERLING  
ASSOCIATES, LLP

# Quality Assurance Findings—*What is...*

## ◆ Approach

- The revised CNSI workplan remains in draft although many of the issues previously identified have been resolved. The current draft plan contains approximately nine weeks of schedule contingency for integration testing and user acceptance testing (UAT) tasks. Adding the contingency to the plan and decreasing the overlap of critical tasks has resulted in a 6-month push to the go-live date, from the previously scheduled July 2008, date, to December 2008.
  - The state and CNSI have worked hard to isolate the costs associated with the extended schedule and have been negotiating how to manage the increased costs. The state will not be asking for additional monies but will need to use the change request monies to fund change requests that are still required for go-live. These change requests are being reviewed and analyzed so that the work can be added into the workplan. Some of the change requests are included in the current version of the plan and some are not. There are several requests that present risk to the schedule because the level-of-effort required to implement them relies upon a best case scenario and could negatively impact the schedule if not managed carefully.
  - While the new schedule provides a more accurate view of the work effort, it is still aggressive and active management of *any* slippage will be required.
- *See Previous Recommendation # 45.*

# Quality Assurance Findings—*What is...*

- ◆ Approach (continued)

Status and issues regarding each of the releases will be discussed in greater detail on the following slides.

## **Medical and Nursing Home (MNH) Claims Release**

- Progress on the MNH Claims Release continues. The focus remains on integration testing, preparation for UAT, data conversion and interface tasks in addition to the various planning tasks related to the draft workplan. The CNSI and state teams continue to work through various questions and challenges related to management of the project tasks. Staffing changes, testing challenges and data conversion issues are complex and bringing clarity to the issues is often difficult. Communication between CNSI and the state at the team level is often strained and requires more management involvement than previously expected. CNSI and DSHS executives discuss the difficulties on a weekly basis and this has brought closure to many issues. However, there remains some distrust between the two parties which has caused the state to increase project controls to make up for perceived and actual immaturity and inadequacies of CNSI's processes. This has been particularly true for testing results. Based on initial reviews of test results, the state does not have full confidence that CNSI has tested the entire application or that the documentation accurately portrays the results that are needed for approval. As a result, the state is requiring documentation standards that are probably more robust than required.
  - The state and CNSI are negotiating options to ensure that the test results are appropriate based on the level of risk. The state is unwilling to lessen the requirements until it can be assured that appropriate internal quality control is applied by CNSI prior to submittal to DSHS. Initial results from this revised process are encouraging, but additional work is required to find a workable balance between the project's risks and controls.

# Quality Assurance Findings—*What is...*

## ◆ Approach (continued)

### **Pharmacy Point-of-Sale (POS) Release**

- CNSI and the state have defined 26 readiness indicators for ensuring a smooth transition into Pharmacy user acceptance testing (UAT). According to the approved Pharmacy UAT Plan, thirteen of these criteria must be completed for entrance into UAT. Currently, seven of the thirteen entrance criteria have been completed. Both the state and CNSI have been working diligently to complete all the remaining readiness activities.
  - One critical entrance criterion is the acceptance of the data conversion test results. The state, CNSI and its subcontractors believe that this criterion can be relaxed. While there is some converted data, more work is needed to submit the entire results set. UAT is not reliant on the complete set of data so the risk to move forward is low.
  - UAT is reliant on one particular set of converted data (the MAC file) which has been accepted by the state. The file appears to be converting without problems and the state believes there is a low risk of any problems surfacing with this data during UAT.
  - SXC will need to populate the provider and client files with converted data for UAT. However, the state has already extracted clients and providers with specific attributes required to run the test, and has verified the results that will be used for the test cases.
  - Pharmacy will not be using converted claims for UAT, so claims data conversion does not need to be complete for UAT to begin.
  - Data Conversion test results must be delivered and accepted by the state. CNSI delivered the test results at the end of this month. The state and CNSI have had progressive discussions on early previews of the test results and expect to have a fairly quick turnaround of their review and approval. However, it is possible the actual acceptance will be after the UAT start date.
  - Although significant progress is being made, the currently defined May 5, 2008 go-live date for the Pharmacy POS is at risk. In order to meet this date, the state must start UAT by March 21. Given the lack of completion on all 13 criteria, the start date for UAT is likely at risk, therefore the current go-live date will probably be missed.

# Quality Assurance Findings—*What is...*

## ◆ Approach (continued)

### **Pharmacy Point-of-Sale (POS) Release (continued)**

- The delays in meeting entrance criteria will cause a compression of work in a short timeline. This compression will stretch already constrained testing resources. The current process will result in staff needing to review test results at the same time they are attending training sessions for UAT increasing the risk that the state cannot complete the reviews timely.

### **Social Services Billing and Payment Release**

- Social services staff have begun to concentrate on completing design activities around “placeholders” that were identified many months ago. During Phase I design activities related to clients, providers, claims and other functional areas, staff identified some design issues that related only to social services. These issues were put on hold until other design issues were resolved and the main medical functional design and development was completed. There are nine topics that will be discussed during multiple design sessions to complete this work. To ensure maximum output from these limited design sessions, the social services release manager has identified a placeholder process to help both the state reviewers and CNSI achieve efficient and effective results. The release manager gathered lessons learned from business analysts from previous design sessions to identify what worked well and what needed improvement. The results from these meetings defined a layered approach to the placeholder process including the use of a “sandbox” to allow users to navigate through the screens and note questions about modifications to the design.
- The project team is working to refine an implementation schedule that better aligns resources and schedules to meet the social services business area needs. The implementation approach will likely include an initial limited release for remaining medical programs with other programs being implemented prior to December 2010.

# Quality Assurance Findings—*What is...*

- ◆ Approach (continued)
  - The ProviderOne project contains multiple facets of information, status, and readiness activities that will need to be communicated to providers, clients and state staff to help prepare them for transition to the new ProviderOne system. The size of the project and the many components that support it creates a complex environment that will need to be explained. To ensure all communications pass the “Plain Talk” rule, the people team has begun to draft communication storyboards as a strategy to define the content and timing of communication in a controlled environment. There will be two sets of storyboards; one for the providers and clients, and one for state staff.
    - Information within the provider/client storyboards will be released through a series of newsletters entitled “ProviderOne Countdown” that are intended to be electronically distributed with hyperlinks to other sites, articles and documents.
    - Information within the state staff storyboards will be released through an existing newsletter entitled “E-News” and will continue to be electronically distributed. This newsletter will contain similar features and functionality as that of the “ProviderOne Countdown.”
    - The intent of this communication is to anticipate and prepare providers, clients and state staff with information that will help build their confidence with ProviderOne, reduce their anxiety of the “unknowns” with the new system, and address any assumptions that may cause distress.
    - This controlled environment will help manage the numerous and frequent communications needed and ensure information is accurate, timely, coordinated and relevant.

## Quality Assurance Findings—*What is...*

- ◆ Approach (continued)
  - CNSI and the state have adjusted the provider training strategy to encompass traditional curriculum, a tutorial, online help and a user manual.
  - The provider training modules will be designed to complement the five areas of provider communication and education that will be posted in the provider newsletter “ProviderOne Countdown.” The five areas include Provider Enrollment, Client Eligibility Verification, Covered Services Verification, Claims Submittal and Payment Reconciliation.
  - The new December 2008 go-live date allows two additional months for provider registration – the activity where providers come into ProviderOne and verify that their data converted properly as well as provide some additional information requested by the state. The additional registration time should alleviate some of the previous concerns regarding the compressed schedule since a very large number of providers need to complete this activity before go live. Providers will need to be trained on how to complete the registration process before they can register. The project’s strategy is to conduct registration training five months before the go-live date, and then provide the remaining training closer to the go-live date.

# Quality Assurance Findings—*What is...*

## ◆ Controls

- Per CNSI's Weekly Integration Test Summary Report for Round 2, dated February 1, 2008, integration testing is in its eighth week of testing. Based on CNSI's January 23, 2008, End-to-End testing schedule goals, the actual execution of test cases was tracking slightly below the planned goals until week 5 when it fell further below the planned goals. In week 8, the execution rate appears to be stagnant (see Chart 1). Passing rates were tracking closely to the planned goals until week 4 when they fell below the planned goal and continue to remain below the planned goals (see Chart 2).

**Cumulative Execution of Test Cases is Below the Planned Goals**  
(Weekly Goals Based on E2E Schedule-1-23-08)

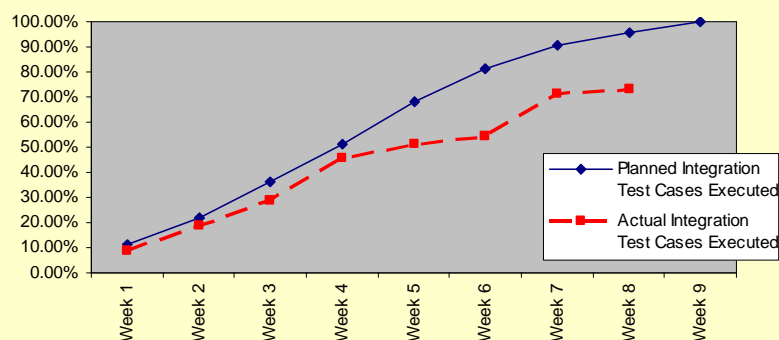


Chart 1

**Cumulative Test Passage of Integration Tests is Below the Planned Goals**  
(Weekly Goals Based on E2E Schedule -1-23-08)

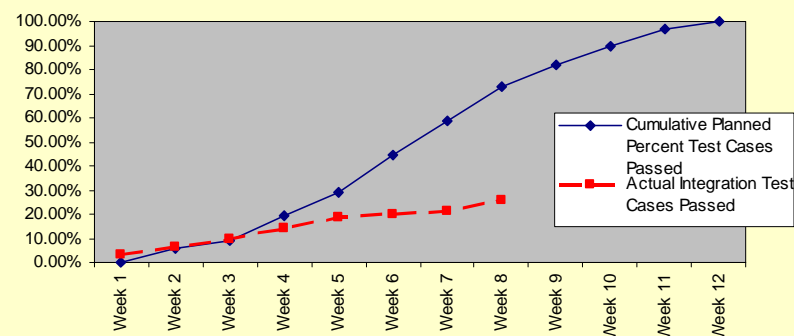


Chart 2

## NOTES:

- Progress is shown as a percent of overall test cases identified. Because the number of test cases changes weekly, the total number of test cases (651) identified in CNSI's E2E Testing Schedule was used to calculate the cumulative percentages status.



# Quality Assurance Findings—*What is...*

## ◆ Controls (continued)

- The state and CNSI meet weekly to review and discuss system testing progress and issues. They rely on a weekly testing summary report produced by CNSI to provide testing status. Recently the state and CNSI decided a more detailed and logical format was needed to improve focus on testing issues, deficiencies, challenges and the potential impacts to the testing schedule including its impacts on the use of schedule contingency. While the testing summary reports are still produced, the key testing conditions and problems are reported in this improved format which has allowed CNSI and the state to highlight problems more readily, and escalate them for resolution prior to the weekly meeting. The following status identifies the conditions around each testing phase.
  - Integration Testing – Round 1
    - Testing is not completed and not all the defects repaired.
    - CNSI has redirected development and testing resources to Round 2 so the progress of Round 1 defect repair has slowed. CNSI reports that all Round 1 defects needing repair for Round 2 are being managed and sequenced appropriately.
    - For Integration Round 1 testing, there are 197 open incident reports (IRs). Of these, 20 are severity 1 (system crashes) or 2 (no work around). IRs related to the call center functionality account for 50% of these high priority open IRs. The average age of the open IRs for severity 1 and 2 is 12 days, a decrease from the previous 24 days. IRs from Round 1 will need to be repaired before the functionality is tested during Round 2 of integration testing.
  - Integration Testing – Round 2
    - CNSI's development and testing resources for Round 1 and 2 are the same. When resources are directed to repair defects in Round 1, Round 2 progress is delayed until these resources are assigned back to Round 2 testing.
    - Many tests in Round 2 are dependent upon the completion of test cases and results in Round 1.
    - Delays in Round 1 will require Round 2 tests to be either delayed or re-sequenced, and could possibly impact the Round 2 schedule.

# Quality Assurance Findings—*What is...*

## ◆ Controls (continued)

- For Integration Round 2 testing, there are 114 open IRs. Of these, 105 are severity 1 (system crashes) or 2 (no work around). IRs related to Claims and Client account for the majority of the high priority open IRs.
- Edits and Audits (Purple Bar)
  - Edits and Audits testing includes 556 test cases identified to date, with 84.2% test cases executed and 76.6% test cases passed.
  - While test case execution and passage is progressing with the existing test cases, the total number of test cases for Account Coding and Pricing Rules is unknown at this time. The state expects there will be 1000+ rules but does not know how many test cases will be identified against these rules. This has created some anxiety for the state as they are not able to prepare and plan for the potential impacts to its resources and schedule.
  - CNSI's current testing strategy does not allow for testing of all conditions within an edit or audit. As a result, there is an increased risk testing will not uncover all substantive defects. The state will need to ensure the system is fully tested before accepting the results. CNSI is re-planning the effort it will take to fully test the audit and edit functionality.
- Overall Impacts from Testing
  - Test results have not been delivered as planned for Integration Testing. Delays in delivery of test results will result in multiple sets of results at the same time. The schedule was established assuming the state will have interim reviews. This approach has not been applied successfully and will result in the use of some contingency for the reviews.
  - Delays in delivery of test results create inefficiencies in the allocation and scheduling of state resources.
  - CNSI has not identified its strategy for rescheduling the test cases that have not been executed each week.

# Quality Assurance Findings—*What is...*

## ◆ Schedule

- The CNSI workplan remains in draft form but is providing a more realistic look into the work effort required to implement the system successfully. Schedule contingency has been added to the plan moving the scheduled implementation date to December 2008, a 6 month delay from the currently approved schedule. All four of the previously separate workplans are now integrated into one plan although tasks related to the data warehouse and information retrieval and social services activities still require revision prior to approval of the plan.
- Integration Testing Round 2 was increased by five weeks in the rebaselined workplan based on history from previous testing efforts. It was hoped that this increased timeline would provide sufficient schedule to complete Round 2. As mentioned previously, the execution of test cases in this phase is behind schedule at this time. A mitigation strategy will be needed to ensure that the passage rate meets the target since previous issues have been related more to fixing issues identified than the execution rate.
  - The process and schedule for repairing defects will need to be assessed further since the correction rate has degraded. The average defect age for Round 1 defects is approximately 3 weeks, yet the Round 2 schedule does not accommodate a three week period at the end of Round 2 testing to repair any remaining defects. The effect will be a delay to the UAT schedule which is now scheduled to begin in March. Any delay to the start of UAT could impact the go-live date further or deplete remaining contingency that is scheduled for the end of UAT, depending on how much of the contingency time is used for defect correction.
    - *See previous recommendations #50 and #51*

# Project Recommendations—*Bringing conditions up to criteria*

|  |   | Feb 2007 | Mar 2007 | Apr 2007 | May 2007 | June 2007 | July 2007 | Aug 2007 | Sept 2007 | Oct 2007 | Nov 2007 | Dec 2007 | Jan 2008 |   |
|--|---|----------|----------|----------|----------|-----------|-----------|----------|-----------|----------|----------|----------|----------|---|
|  | Recommendation  |          |          |          |          |           |           |          |           |          |          |          |          | Status/Comments   |
| 33   | The state should develop contingency plans for those functional areas at high risk or with high impact assessments where agreement has not been reached with CNSI for inclusion in the current project scope or schedule (e.g., data warehouse solution, NPI applet and resulting data conversion impacts, etc.). | ➤        | ➤        | ➤        | ➤        | ➤         | ➤         | ➤        | ➤         | ➤        | ➤        | ➤        | ➤        | The state is working to develop plans for major risks. Contingency plans for data conversion activities (e.g. clean-up activities) have not been completely documented. The risk management process is not fully mature at this time. (6/30/07) |
| 38   | CNSI should include baseline start, baseline finish, and actual finish columns in the work plan.  | ➤        | ➤        | ➤        | ➤        | ➤         | ➤         | ➤        | ➤         | ➤        | ➤        | ➤        | ➤        | CNSI has included the baseline finish column but not the baseline start column. CNSI plans to discuss with the state how this recommendation should be resolved. This recommendation will remain open. (10/31/07)                               |
| 40   | The state and CNSI should negotiate a test case review process and schedule that sufficiently protects the state's interest, yet minimizes the need for critical state resources and schedule slippage.   | ➤        | ➤        | ➤        | ➤        | ➤         | ➤         | ➤        | ➤         | ➤        | ➤        | ➤        | ➤        | This requirement has been partially fulfilled. The processes for test case review were established but have not successfully lowered the schedule risk. (1/31/08)   |
| 45   | CNSI should revise the current draft baseline plan to reduce overlap in integration test iterations. Sufficient contingency time should be included to ensure one whole test review and fix cycle is included between the test iterations.  |          |          |          |          | ★         | ➤         | ➤        | ➤         | ➤        | ➤        | ➤        | ✓        | CNSI has delivered its re-baselined work plan which reduces the overlap of tasks and add contingency. This recommendation is closed. (1/31/08)  |
| 46   | The state and CNSI should develop a process and plan for including updates to ProviderOne's rules, edits, audits configuration.   |          |          |          |          |           | ★         | ➤        | ➤         | ➤        | ➤        | ➤        | ➤        | CNSI and the state have developed a process but it has not been finalized. (11/30/07)   |
| ★ Recommendation Made    ✓ Recommendation implemented    ➤ In progress    ✕ Recommendation not yet implemented |   |          |          |          |          |           |           |          |           |          |          |          |          |   |

# Project Recommendations—*Bringing conditions up to criteria*

|  |   | Feb 2007 | Mar 2007 | Apr 2007 | May 2007 | June 2007 | July 2007 | Aug 2007 | Sept 2007 | Oct 2007 | Nov 2007 | Dec 2007 | Jan 2008 |  |
|--|---|----------|----------|----------|----------|-----------|-----------|----------|-----------|----------|----------|----------|----------|--|
|  | Recommendation  |          |          |          |          |           |           |          |           |          |          |          |          | Status/Comments  |
| 48   | CNSI should increase the staff resources required to manage multiple project work plans so that appropriate dependencies and linkages between the plans can be maintained, managed and reported on. |          |          |          |          |           |           |          | ★         | ➤        | ➤        | ➤        | ➤        | The workplan is being updated. Additional resources have been applied in the update process. This recommendation will remain open until the plan is accepted. (1/31/08)  |
| 49   | CNSI should verify relevant task dependencies and linkages between all of its workplans, and update the master work plan to automatically reflect these dependencies and linkages.                  |          |          |          |          |           |           |          | ★         | ➤        | ➤        | ➤        | ➤        | CNSI and the state have agreed to integrate all workplans into one plan. The current draft plan contains this consolidated view. This will remain open until the workplan is accepted. (1/31/08)   |
| 50   | Schedule contingency should be added to UAT and pre-production testing that is comparable to delays seen in previous testing tasks.   |          |          |          |          |           |           |          |           |          | ★        | ➤        | ➤        | CNSI's draft workplan contains a 9 week contingency pool placed after UAT. The strategy is being reviewed. This recommendation will remain open until the workplan is accepted. (12/31/07)   |
| 51   | The state and CNSI should add a 10-15% schedule contingency to all critical path tasks.   |          |          |          |          |           |           |          |           |          | ★        | ➤        | ➤        | CNSI's draft workplan contains a 9 week contingency pool placed after UAT which incorporates the ability to manage it across multiple critical path items. The state and CNSI negotiated strategy will not contain specific contingency on other critical path items although the critical path is identified and monitored. This recommendation will remain open until the workplan is accepted. (12/31/07) |
| 52   | The state should develop a tool that consolidates high-level resource estimates related to integrated workplan tasks.   |          |          |          |          |           |           |          |           |          |          | ★        | ✗        | This recommendation has not been implemented. (1/31/08)  |
| 53   | The state should develop a process for loading non-project staff resource estimates into the CNSI and integrated workplan.  |          |          |          |          |           |           |          |           |          |          | ★        | ✗        | This recommendation has not been implemented. (1/31/08)  |
| ★ Recommendation Made    ✓ Recommendation implemented    ➤ In progress    ✗ Recommendation not yet implemented |   |          |          |          |          |           |           |          |           |          |          |          |          |  |